In today's knowledge-based economy, the sources of competitive advantage lie more and more in webs of relationships among a variety of firms that over time originate the emergence of interfirm strategic networks. The paper aims to shed light on the role of complex leadership exerted by network central firms in promoting and supporting network interactions and the ensuing processes of knowledge and resource transfer and diffusion. Processes on which the network-based sources of competitive advantage are rooted. In the attempt to make the proposed contribution, on the one hand, we underscore the emergent nature of network interactions stemming from the self-organizing behaviors that spontaneously arise inside the interfirm strategic network. On the other hand, we show that the leadership action of network central firms sparks off enabling effects that join to self-organizing network behaviors. The result of the two mentioned forces is an expansion of the network interaction potential that permits both the networked actors and the strategic network as a whole to reach level of performance that may not be accomplished otherwise.